

REMARKS

As a result of the foregoing amendments, Claim 5 has been canceled, and Claim 1 has been amended to include the limitations of canceled Claim 5. Now canceled Claim 5 required that the cells to be cultured be obtained by surgical resection from a patient. Claim 1 has also been amended to recite that the cells obtained by surgical resection are a mixture of astrocytes and microglial cells (as supported by the Specification in the second paragraph of page 2) and that the resected cells are dissociated (see Example 1.1, starting on page 21 of the Specification). No new matter has been entered by way of these amendments.

Claims 14-32 have been withdrawn from further consideration as being drawn to a non-elected invention. Accordingly, claims 1-4 and 6-13 are now being examined.

Claims 1-6 and 13 are Not Anticipated

Applicants respectfully traverse the rejection of claims 1 – 6 and 13 under 35 U.S.C. 102(b) as being anticipated by De Groot *et al.* (1977) "Establishment of Human Adult Astrocyte Cultures Derived from Postmortem Multiple Sclerosis and Control Brain and Spinal Cord Regions: Immunophenotypical and Functional Characterization" J Neuroscience Res. 49:342-54 (hereinafter "De Groot"). De Groot teaches a preliminary step specifically for removing microglial cells from the astrocyte culture, and that step is excluded by amended Claim 1 and all claims which depend from Claim 1. Accordingly, the claimed process for producing an essentially pure culture of astrocytes is not anticipated by the disclosure of De Groot.

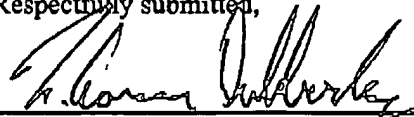
De Groot teaches a method of isolating a culture of astrocytes, wherein resected spinal cord or brain tissues were mechanically dissociated and then "... to avoid contamination of the astrocyte cultures ..." the cell suspension was plated onto uncoated tissue culture flasks and incubated for 2 hours. "This step allows monocytes/macrophages to adhere to the bottom of the flasks. Subsequently, 10 ml of the supernatant containing dissociated [astrocyte] cells and myelin debris was plated into [new flasks] ...," De Groot, p. 344, first column. Microglial cells are one type of macrophage (see Dorland's Illustrated Dictionary, 27th Edition – copy of title page and definition of macrophage attached). Only after this procedure was the astrocyte-containing supernatant plated on flasks to which the astrocytes could adhere for 48 hours.

In contrast, the instant claims require that the dissociated cells of the resection be incubated *directly* on a flask under conditions enabling attachment of the astrocytes to the flask. Accordingly, the instant claims exclude the 2-hour incubation on an untreated flask step taught by De Groot specifically for the purpose of removing macrophage, and therefore microglial, cell contaminants. For this reason, the instant claims are not anticipated by De Groot under 35 U.S.C. 102 (b). Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 7-12 are Non-obvious

Applicants respectfully traverse the rejection of claims 7-12 under 35 U.S.C. 103(a) as being unpatentable over De Groot in view of US 5,627,047 and US 5,202,120. Rejected claims 7-12 all depend from Claim 1. As discussed above, De Groot teaches a different step for the removal of microglial cell contaminants from the astrocyte culture, and that step is excluded by amended Claim 1. Since De Groot specifically teaches the instantly excluded step to be necessary for the removal of microglial cells, there is no teaching, suggestion or motivation in that reference that would lead one of skill in the art of microbiology to exclude the De Groot step and thereby arrive at the instantly claimed process. Furthermore, nothing in US 5,627,047 or US 5,202,120 teaches, suggests or motivates one of skill in the art to exclude the De Groot step and thereby arrive at the instantly claimed process. Accordingly, the combination of De Groot, US 5,627,047 and US 5,202,120 fail to teach or suggest the instantly claimed process. Reconsideration and withdrawal of this rejection are respectfully requested.

Respectfully submitted,



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